- (h) The person assuming the watch will report his/her relief to the same person from whom permission was requested to relieve.
- (i) On stations where a log is maintained, the log will be completed and signed by the offgoing watchstander before leaving the watch station.
- (7) The relief of the Engineering Officer of the Watch shall be conducted following the procedures listed in the Engineering Departmental Manual for Naval Nuclear Propulsion Plants (OPNAV C9210.2 (NOTAL)) (when applicable).
- b. CONTINUITY OF CONTROL AND KNOWLEDGE. THE OOD, DIVING OFFICER OF THE WATCH, AND THE EOOW WILL NOT RELIEVE UNTIL THE WATCH DIRECTLY UNDER THEIR COGNIZANCE HAS BEEN PROPERLY RELIEVED. This will help provide for continuity of control and knowledge in case of a casualty during the transition period. AT NO TIME WILL THE TWO SENIOR (KEY) PEOPLE OF A WATCH AREA BE IN THE PROCESS OF TRANSFERRING THE WATCH AT THE SAME TIME.
- c. PATTERN OF RELIEF. The specific lead times for ensuring proper relief of members of the watch is flexible and may be reduced during quiet periods, but the sequence of relief is firm. The general pattern of relief will be:
- (1) One-half hour before the hour Oncoming watch is on station to make inspection, read logs and turn-over sheets, and obtain information from relief.
- (2) Fifteen minutes before hour Watch members are relieved.
 - (3) On the hour Supervisors relieve (OOD, EOOW, etc.).
- 420. THE DECK AND ENGINEERING LOGS. NO ERASURES SHALL BE MADE IN THE DECK LOG, MAGNETIC COMPASS RECORD, ENGINEERING LOG, OR ENGINEER'S BELL BOOK. WHEN A CORRECTION IS NECESSARY, A SINGLE LINE SHALL BE DRAWN THROUGH THE ORIGINAL ENTRY SO THAT THE ENTRY REMAINS LEGIBLE. THE CORRECT ENTRY SHALL THEN BE INSERTED SO AS TO ENSURE CLARITY AND LEGIBILITY. CHANGES SHALL BE MADE ONLY BY THE PERSON REQUIRED TO SIGN THE RECORD FOR THE WATCH AND SHALL BE INITIALED BY HIM/HER ON THE MARGIN OF THE PAGE. SHOULD THE COMMANDING OFFICER DIRECT A CHANGE TO ONE OF THE FOREGOING RECORDS, THE PERSON CONCERNED SHALL COMPLY, UNLESS THE PROPOSED CHANGE IS BELIEVED TO BE INCORRECT. IN SUCH EVENT THE COMMANDING OFFICER SHALL ENTER SUCH REMARKS ON THE RECORD OVER HIS/HER OWN SIGNATURE. AFTER THE COMMANDING OFFICER SIGNS A LOG, NO CHANGES SHALL BE MADE WITHOUT HIS/HER PERMISSION.

421. THE DECK LOG

- A. THE DECK LOG SHALL BE PREPARED IN THE MANNER AND FORM PRESCRIBED BY THE CHIEF OF NAVAL OPERATIONS (OPNAVINST 3100.7B). THE DECK LOG SHALL BE A COMPLETE DAILY RECORD, BY WATCHES, WHICH SHALL DESCRIBE EVERY OCCURRENCE OF IMPORTANCE CONCERNING THE CREW AND THE OPERATION AND SAFETY OF THE SHIP OR ITEMS OF HISTORICAL VALUE. THE DECK LOG SHALL INCLUDE INFORMATION REGARDING:
- (1) ORDERS UNDER WHICH THE SHIP IS OPERATING AND THE CHARACTER OF DUTY IN WHICH ENGAGED.
- (2) SIGNIFICANT CHANGES IN THE STATE OF THE SEA AND WEATHER.
 - (3) COURSES AND SPEEDS OF THE SHIP.
 - (4) BEARING AND DISTANCES OF OBJECTS DETECTED.
 - (5) POSITION OF THE SHIP.
 - (6) TACTICAL FORMATION OF THE SHIPS IN COMPANY.
 - (7) DRAFT.
 - (8) SOUNDINGS.
 - (9) ZONE DESCRIPTION.
 - (10) PARTICULARS OF ANCHORING AND MOORING.
- (11) CHANGES IN THE STATUS OF SHIP'S PERSONNEL OR PASSENGERS (TAKEN PRISONER, ABSENTEES, TAD, ETC.), OTHER THAN THOSE RECEIVED OR LOST BY REASON OF PERMANENT CHANGE OF STATION.
- (12) DAMAGE OR ACCIDENT TO THE SHIP, ITS EQUIPAGE, OR CARGO.
- (13) DEATH OR INJURIES TO PERSONNEL, PASSENGERS, VISITORS, LONGSHOREMEN, HARBOR WORKERS, OR REPAIR PERSONNEL.
- (14) MEETING, ADJOURNING, OR RECESSING OF COURTS-MARTIAL AND OTHER FORMAL BOARDS.
 - (15) ARRESTS, SUSPENSIONS, AND RESTORATIONS TO DUTY.
 - (16) OTHER MATTERS SPECIFIED BY COMPETENT AUTHORITY.

.

- b. SHIPS MAY BE EXEMPT FROM RECORDING DAILY ENTRIES BY WATCHES IN THE DECK LOG ONLY UNDER THE FOLLOWING CIRCUMSTANCES.
- (1) THE CHIEF OF NAVAL OPERATIONS, THROUGH THE FLEET OR FORCE COMMANDER, MAY DIRECT THAT THE DECK LOG FOR SHIPS ENGAGED IN SPECIAL OPERATIONS, WHOSE OPERATIONS ARE RECORDED THROUGH MEANS OTHER THAN THE DECK LOG, BE LIMITED TO THE NONOPERATIONAL DATA REQUIRED BY THE PRECEDING PARAGRAPH. ENTRIES SHALL BE MADE WHEN NOTEWORTHY EVENTS OCCUR RATHER THAN DAILY BY WATCHES. THE OPERATIONAL DATA FOR SUCH SHIPS SHALL BE RECORDED IN THE MANNER PRESCRIBED BY THE CHIEF OF NAVAL OPERATIONS. OPNAVINST 3100.78 (NOTAL) provides current guidance for procedures for keeping deck logs.
- (2) WHILE UNDERGOING A SCHEDULED PERIOD OF REGULAR OVERHAUL, CONVERSION, OR INACTIVATION, SHIPS MAY MAKE LOG ENTRIES WHEN NOTEWORTHY EVENTS OCCUR RATHER THAN DAILY BY WATCHES.
- 422. THE MAGNETIC COMPASS RECORD. THE MAGNETIC COMPASS RECORD SHALL BE A LOG OF GYRO AND MAGNETIC COMPASS COURSES, ADJUSTMENTS, AND TESTS. GYRO AND MAGNETIC STEERING COURSES SHALL BE RECORDED HOURLY AND UPON STEADYING ON A NEW COURSE. DURING FREQUENT AND RAPID MANEUVERING, ENTRIES NEED ONLY BE MADE HOURLY. GYRO AND STANDARD MAGNETIC COMPASS COURSES SHALL BE RECORDED AT LEAST DAILY. POSITION ENTRIES SHALL BE MADE AT 0800, 1200, AND 2000 AT A MINIMUM. THE NAVIGATOR SHALL SIGN AND SUBMIT THE RECORD TO THE COMMANDING OFFICER FOR APPROVAL QUARTERLY.
- 423. THE ENGINEERING LOG. THE ENGINEERING LOG SHALL BE A COMPLETE DAILY RECORD BY WATCHES OF IMPORTANT INFORMATION ABOUT THE ENGINEERING DEPARTMENT AND THE OPERATION OF THE PROPULSION PLANT. THE ENGINEERING LOG SHALL INCLUDE:
 - a. TOTAL MILES STEAMED FOR THE DAY.
 - b. DRAFT AND DISPLACEMENT (SURFACE SHIPS ONLY).
- C. COMBINED TOTAL FUEL, WATER, AND LUBRICATING OIL ON HAND (SURFACE SHIPS ONLY).
- d. DISPOSITION OF ALL ENGINES, BOILERS, AND PRINCIPAL AUXILIARIES AND ALL CHANGES TO THEM.
- e. ALL INJURIES AND MATERIAL CASUALTIES OCCURRING IN THE DEPARTMENT.
 - f. OTHER MATTERS SPECIFIED BY COMPETENT AUTHORITY.

THE ENGINEERING LOG SHALL BE PREPARED IN THE MANNER AND FORM PRESCRIBED BY THE COMMANDER, NAVAL SEA SYSTEMS COMMAND (NSTM CHAPTER 090 REFERS).

424. THE ENGINEER'S BELL BOOK

- a. THE ENGINEER'S BELL BOOK SHALL BE A CHRONOLOGICAL RECORD OF ORDERS PERTAINING TO THE SPEED OF THE PROPULSION ENGINES OR MOTORS. IT SHALL SHOW FOR THE SHAFT TO WHICH IT PERTAINS, EACH TIME A PROPELLER SPEED IS ORDERED, THE MEANING OF SUCH ORDER, AND THE CORRESPONDING REVOLUTIONS PER MINUTE. SHIPS AND CRAFT EQUIPPED WITH CONTROLLABLE PITCH PROPELLERS SHALL, IN ADDITION TO SIGNALED SPEED AND REVOLUTIONS PER MINUTE, RECORD PROPELLER PITCH FOR EACH SIGNALED CHANGE IN SPEED. THE SHAFT COUNTER READINGS SHALL BE RECORDED UPON GETTING UNDERWAY, HOURLY THEREAFTER, AND UPON SECURING THE ENGINE. ALL OTHER ENTRIES SHALL BE MADE UPON RECEIPT OF EACH ORDER. NAVAL SHIPS TECHNICAL MANUAL, CHAPTER 090 PROVIDES SPECIFIC GUIDANCE ON REQUIRED ENTRIES.
- b. WHEN PROPULSION ENGINES OR MOTORS ARE CONTROLLED DIRECTLY BY THE BRIDGE THROUGH ELECTRO/MECHANICAL/ELECTRONIC MEANS, THE BELL BOOK NEED NOT INCLUDE ENGINE ORDERS PROVIDED THE DECK LOG RECORDS SUCH ORDERS. THE BELL BOOK AND DECK LOG SHALL SHOW THE TIME THE CONTROL OF ENGINES OR MOTORS IS ASSUMED AND RELINQUISHED BY THE BRIDGE.
- C. FOR SHIPS NOT EQUIPPED WITH AUTOMATIC BELL LOGGERS, TWO PERSONS SHALL BE STATIONED AT THE THROTTLE CONTROL STATION, DURING MANEUVERING OPERATIONS IN RESTRICTED WATERS, TO EXECUTE AND RECORD ENGINE ORDERS SEPARATELY.
- d. ON SHIPS WHERE BELL BOOK ENTRIES ARE RECORDED THROUGH USE OF ELECTRONIC BELL/DATA LOGGER, EQUIPMENT BEING PLACED OUT OF COMMISSION DOES NOT ALLEVIATE THE SHIP OF THE RESPONSIBILITY TO MAINTAIN A BELL BOOK AS DESCRIBED ABOVE. SHOULD SUCH A CASUALTY OCCUR, A BELL BOOK WILL BE ESTABLISHED ON THE BRIDGE, PROPULSION CENTRAL CONTROL STATION, OR MAIN ENGINE ROOMS, AS PRESCRIBED BY THE COMMANDING OFFICER.
- 430. THE WATCH ORGANIZATION UNDERWAY. The shipboard watch organization underway is based on the condition of readiness and the tactical environment. Although a Tactical Commander's organization is normally transparent to shipboard watch structures, the Composite Warfare Commander Doctrine may be the doctrine under which individual ships will operate when assigned to tactical organizations such as a Carrier Battle Group (CVBG), Surface Combatant Task Group (SCTG), or Amphibious Task Force/Task Group (ATF/ATG). It is therefore necessary tactical knowledge for all non-engineering watchstanders underway. The following section provides general information. Specific details